DOCKET NO.: TN222/USYS-0083
Application No.: 09/702,224
Office Action Dated: March 12, 2004

PATENT
REPLY FILED UNDER EXPEDITED
PROCEDURE PURSUANT TO
37 CFR § 1.116

REMARKS

Claims 1-11 are pending in the application and stand rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,513,009 to Comerford *et al.* ("Comerford") in view of U.S. Patent No. 6,246,981 to Papineni ("Papineni"). In addition, claims 5, 8 and 10 have been objected to for the reason given on page 2 of the Office Action. We are unsure of the basis of the objection to claims 5, 8 and 10, and of whether it is necessary to respond to the objection, but the undersigned attorney would be happy to work with the Examiner to resolve any outstanding issues. In addition, we respectfully traverse the rejection under 35 U.S.C. §103(a) for the reasons set forth below. The Examiner is respectfully urged to reconsider the application in view of the remarks below and to withdraw the rejection.

The Rejection Under 35 U.S.C. §103(a)

"The prior art must provide a motivation or reason for the worker in the art, *without the benefit of [applicant's] specification*, to make the necessary changes in the reference device." M.P.E.P. § 2144.04 (citing *Ex parte Chicago Rawhide Manufacturing Co.*, 223 U.S.P.Q. 351, 353 (Bd. Pat. App. & Inter. 1984) (emphasis added). To establish a prima facie case of obviousness, "there must be some teaching, suggestion or motivation in the prior art to make the specific combination that was made by the applicant." *In re Dance*, 160 F.3d 1339, 1343 (Fed. Cir. 1998). "In other words, the examiner must show reasons that the skilled artisan, confronted with the same problem as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references for combination in the manner claimed." *In re Rouffet*, 149 F.3d 1350, 1357 (Fed. Cir. 1998).

Here, Applicants respectfully assert that the Examiner has failed to establish a *prima facie* case of obviousness because neither Comerford nor Papineni provide specific guidance that would lead one of ordinary skill in the art to the present invention. More particularly, and as discussed below, the combination of Comerford and Papineni proposed by the Examiner, assuming only for the sake of argument that such a combination is proper, fails to teach or suggest Applicants' claimed invention. This is because Applicants' invention is primarily directed to a development/design tool for use by programmers, subject matter on which the prior art is silent.

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I. Applicants' Claimed Invention

As mentioned, an important aspect of Applicants' invention is that it provides a **development/design tool** for programmers. For example, claims 1 and 5 are directed to a method/system for "**developing** a dialogue-enabled application for executing on a computer that enables a human and a computer to interact... ."

Claim 1, e.g., recites the acts of:

> (a) inputting instructions specifying the flow of a conversation to a design tool, **said design tool producing a data file, said data file containing information relating to prompts, responses, branches and conversation flow for implementing a programmer-defined human-computer speech-enable interaction**; and

> (b) instantiating an interpreter object within an application, the interpreter object interpreting the data file to provide the programmer-defined human-computer dialogue-enabled interaction defined by the data file.

Independent claim 5 is similar in this respect. In addition, we hereby propose to amend claim 8 to clarify the claim (but not change its scope) by making it clear that the recited "instructions" are specific to the applicants' invention of a **design tool** for a programmer.

> **8. (Currently amended):** A computer-readable medium comprising computer executable instructions for instructing a computer to perform the acts of:
>
> accepting instructions <u>into a design tool</u>, said instructions specifying a programmer-defined flow of conversation between a human and a computer;
>
> <u>said design tool</u> producing a data file for input to an interpreter; interpreting said data file ... .

Claim 10 is somewhat different in that it is directed to an application that employs (consumes) a "data file" of the type produced by the design tool. If necessary to advance prosecution of the remaining claims, Applicants would consider dividing claim 10 and its dependent claims out of the present application. We welcome discussion with the Examiner on this point.

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Accordingly, claims 1-9 claims are directed to technology (i.e., a design tool) for use by a programmer in developing a human-computer dialogue. The design tool generates a data file that is used by a dialog flow interpreter within a given application.

II. The Prior Art and Differences Between the Claimed Invention and the Prior Art

The Examiner seems to have taken the position that the primary reference, Comerford, discloses all elements of Applicants' independent claims 1, 5, 8 and 10 except for the feature of "programmer defined". Specifically, the Examiner admits that Comerford fails to meet the "programmer defined" limitation but has taken the position that Papineni discloses this. Applicants respectfully disagree with the whole rationale of the rejection.

Comerford does not teach or suggest a development tool for a programmer of a dialog management system. As its very title suggests the opposite, Comerford discloses a "low resource" dialog manager. The Office Action is not clear but *may* imply that Comerford's "user interface" is a design tool as recited in Applicants' claims. (*Office Action dated March 7, 2004* at p. 3). But this is clearly not the case. The user interface in Comerford is for an end user of an application where speech recognition and spoken dialog are required; it is not a design tool.

Papineni cannot be used to supplement Comerford's deficiency as a reference against the present invention. Papineni discloses a system for conversant interaction where a dialog manager selects an applicable form. This is significant because a dialogue management system, like Papineni's, is able to choose the relevant predefined form responsive to the user's input information. This is evident from the fact that the entirety of Papineni's specification goes into great detail about how the system would be used to fill out a form. Nowhere does Papineni mention a design tool for a programmer in order to define the dialog for a given application.

Accordingly, applicants respectfully submit that the combination of Comerford and Papineni is insufficient to establish a prima facie case of obviousness. M.P.E.P. § 2143.01. Neither Comerford nor Papineni provide specific guidance that would lead one of ordinary skill in the art to the present invention.

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Applicants' independent claim 10 is directed to a dialog flow interpreter ("DFI") that uses the data file that comes from the design tool. The claimed invention includes a DFI which can work with a "language interpreter" (see claim 11). Thus, there are two "interpreters" that work together. The DFI reads the data file created by the design tool and works in addition to a language interpreter, a recognition engine, and a voice input/output device, as claimed in dependent claim 11.

Again, the Examiner has taken the position that the primary reference, Comerford, discloses all elements except for the feature of "programmer defined" in the dialog manager in a human-computer dialog interactive interface. The Office Action suggests that while Comerford fails to disclose the feature of "programmer defined," Papineni teaches the feature of programmer defined or preprogrammed in a dialog manager.

Applicants' again respectfully disagree with the rejection. The "interpreter" of Comerford is perhaps analogous to the "language interpreter" recited in Applicants' claim 11, but there is no corresponding element for the claimed dialog flow interpreter of claim 10. In other words, Comerford's interpreter is not a DFI. Comerford's "interpreter" does not have, and would have no need for, Applicants' claimed design tool and data file features, which work directly with the DFI. Applicants respectfully submit, therefore, that the subject matter of claims 10 and 11 is patentable over Comerford and Papineni, alone or in combination.

In sum, Applicants respectfully submit that independent claims 1, 5, 8, and 10 are allowable over Comerford and Papineni.

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CONCLUSION

For all the foregoing reasons, Applicants respectfully submit that claims 1-11 are in condition for allowance. Reconsideration of the application and an early Notice of Allowance are respectfully solicited. In the event, however, that the Examiner believes that the present application is not allowable for any reason, Applicants respectfully request that the Examiner contact the undersigned attorney at **206 332-1384** to discuss resolution of any remaining issues.

Dated: July 12, 2004

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